

ENFORCER Products, Inc.  
P.O. Box 1060  
Cartersville, GA 30120  
1-888-805-HELP

# Material Safety Data Sheet

## and Safe Handling and Disposal Information

**Section 1. Chemical Product and Company Identification**

**Product name** Citrus Cleaner & Degreaser

**Product Code** CIT32/128

**Date of issue** 12/09/03 **Supersedes** 06/16/00

**Emergency Telephone Numbers**

**For MSDS Information:**  
Compliance Services (404) 352-1680

**For a Medical Emergency:**  
CHEM-TEL  
(800) 255-3924 (Toll Free - Calls Recorded)

**For a Transportation Emergency:**  
CHEMTREC  
(800) 424-9300 (Toll Free - Calls Recorded)

**Prepared by** Compliance Services Group  
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Atlanta, GA 30318

**Section 2. Composition, Information on Ingredients**

Name of Hazardous Ingredients	CAS #	% by Weight	Exposure Limits
D-LIMONENE - orange distillate; citrus terpene; cyclohexene, 1-methyl-4-(1-methylethenyl)-, (R)-	5989-27-5	1-5	Not established
MONOETHANOLAMINE; 2-aminoethanol; MEA	141-43-5	1-5	<b>OSHA PEL (United States).</b> TWA: 3 ppm 8 hour(s). <b>ACGIH TLV (United States).</b> STEL: 6 ppm 15 minute(s).
ETHYLENE GLYCOL MONOBUTYL ETHER; 2-butoxyethanol; butyl cellosolve	111-76-2	1-5	<b>ACGIH TLV (United States).</b> <b>Skin</b> TWA: 20 ppm 8 hour(s). Form: Vapor <b>OSHA PEL (United States). Skin</b> TWA: 25 ppm 8 hour(s). Form: Vapor
DIPROPYLENE GLYCOL N-BUTYL ETHER; 1-(2-butoxy-1-methoxy)- 2-propanol; glycol ether dpnb	29911-28-2	1-5	Not established

**Section 3. Hazards Identification**

**Acute Effects** **Routes of Entry** Absorbed through skin. Eye contact. Inhalation.

**Skin** Hazardous in case of skin contact (irritant, permeator). Direct contact may cause irritation and redness.

**Eyes** Hazardous in case of eye contact (irritant). Inflammation of the eye is characterized by redness, watering, and itching.

**Inhalation** Hazardous in case of inhalation. May cause respiratory tract irritation. Avoid inhalation of vapors and spray mist.

**Ingestion** Aspiration hazard if swallowed- can enter lungs and cause damage.

**Carcinogenic Effects** Ingredients: Not listed as carcinogen by OSHA, NTP or IARC.

**Chronic Effects** Slightly hazardous in case of skin contact (permeator). The substance may be toxic to blood, kidneys, liver. Repeated or prolonged exposure to the substance can produce target organs damage.

See Toxicological Information (section 11)

**HMIS**

<b>Health</b>	<b>1</b>
<b>Fire Hazard</b>	<b>2</b>
<b>Reactivity</b>	<b>0</b>
<b>Personal Protection</b>	<b>B</b>

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash affected area with soap or mild detergent and water. Get medical attention if irritation develops.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. Get medical attention.
<b>Ingestion</b>	ASPIRATION HAZARD. Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Section 5. Fire Fighting Measures**

<b>Flash Point</b>	Closed cup: 51°C (124°F). (Tagliabue.)	<b>Flammable Limits</b>	Not determined.
<b>Flammability</b>	Combustible.		
<b>Fire Hazard</b>	Combustible liquid and vapor. Avoid all possible sources of ignition (spark or flame).		
<b>Fire-Fighting Procedures</b>	Use DRY chemicals, CO <sub>2</sub> , water spray or foam. Fire-fighters should wear proper protective equipment.		

**Section 6. Accidental Release Measures**

<b>Spill Clean up</b>	Put on appropriate personal protective equipment (see Section 8). Absorb with an inert material and place in an appropriate waste disposal container.
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**Section 7. Handling and Storage**

<b>Handling</b>	Avoid contact with eyes, skin or clothing. Avoid inhalation. Use only with adequate ventilation. Keep away from food, drink and animal feeding stuffs. Keep away from heat, sparks and flame.
<b>Storage</b>	Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame). Store between 40°F - 120°F (4.4°C - 49°C). Protect from freezing. Keep out of the reach of children.

**Section 8. Exposure Controls, Personal Protection****Personal Protection****Protective Clothing (Pictograms)**

<b>Eyes</b>	Safety glasses.
<b>Body</b>	Gloves. Recommended: Nitrile gloves. Rubber gloves. Neoprene gloves.



**Respirator:** Use with adequate ventilation. A respirator is not needed under normal and intended conditions of product use.

**Section 9. Physical and Chemical Properties**

<b>Physical State</b>	Liquid.	<b>Color</b>	Amber.
<b>pH</b>	11.0-12.0	<b>Odor</b>	Citrus
<b>Boiling Point</b>	Not determined.	<b>Vapor Pressure</b>	Not determined.
<b>Specific Gravity</b>	1.01 (Water = 1)	<b>Vapor Density</b>	Not determined.
<b>Solubility</b>	Easily soluble in cold water, hot water.	<b>Evaporation Rate</b>	1 compared to water
		<b>VOC (Consumer)</b>	171.4 (g/l). 1.43 lb/gal 17%

**Section 10. Stability and Reactivity**

<b>Stability and Reactivity</b>	The product is stable.
<b>Incompatibility</b>	Reactive with oxidizing agents. Keep away from heat, sparks and flame.
<b>Hazardous Polymerization</b>	Will not occur.
<b>Hazardous Decomposition Products</b>	These products are carbon oxides (CO, CO <sub>2</sub> ), nitrogen oxides (NO, NO <sub>2</sub> ...).

**Section 11. Toxicological Information**

<b>Toxicity to Animals</b>	<b>Ethylene Glycol Monobutyl Ether:</b>
	ORAL (LD50): Acute: 1746 mg/kg [Rat]. 1519 mg/kg [Mouse]. 1414 mg/kg [Guinea pig].
	DERMAL (LD50): Acute: 435 mg/kg [Rabbit]. >2000 mg/kg [Guinea pig].
	VAPOR (LC50): Acute: 700 ppm 7 hour(s) [Mouse]. >633 ppm 1 hour(s) [Guinea pig].
	>691 ppm 1 hour(s) [Guinea pig].
	<b>Monoethanolamine:</b>
	ORAL (LD50): Acute: 2100 mg/kg [Rat].
	DERMAL (LD50): Acute: 1000 mg/kg [Rabbit].
	<b>d-Limonene:</b>
	ORAL (LD50): Acute: 5600 mg/kg [Mouse]. 4400 mg/kg [Rat].
	DERMAL (LD50): Acute: >5000 mg/kg [Rabbit].

**Section 12. Ecological Information****Ecotoxicity** Not available.**Biodegradable/OE** Not available.**Section 13. Disposal Considerations****Waste Information** Waste must be disposed of in accordance with federal, state and local environmental control regulations.**Waste Stream** Code: - D001

Classification: - (Hazardous waste.)

**Consult your local or regional authorities.****Section 14. Transport Information****Proper shipping name** Not regulated.**DOT Classification** Not a DOT controlled material (United States).**UN number** None.**TDG Classification** Not a TDG controlled material.**Section 15. Regulatory Information****U.S. Federal Regulations** SARA 313 toxic chemical notification and release reporting:

Ethylene Glycol Monobutyl Ether (certain Glycol Ethers)

Clean Water Act (CWA) 311: No products were found.

Clean air act (CAA) 112 regulated toxic substances: Ethylene glycol monobutyl ether

**State Regulations** California prop. 65: No products were found.**WHMIS (Canada)** Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).  
Class D-2B: Material causing other toxic effects (TOXIC).**Section 16. Other Information***To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.**Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.*